

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

pi

1. (Currently Amended) In a device having one or more a plurality of electronic program guide (EPG) loaders that are each configured to enabling the device to receive EPG data from one or more EPG sources, a method for interfacing the one or more EPG loaders with a database associated with the device, the method comprising the steps of:

receiving, at each of a plurality of EPG loaders. EPG data from a different EPG data source;

collecting the EPG data from the EPG loaders at a writer module;

upon determining at the writer module that there is a conflict in the EPG data received from at least two of the different EPG data sources, resolving the conflict according to conflict resolution criteria;

calling a function of a-the writer module operating at the device that-collects the EPG data from the EPG-loaders and that stores to store the EPG data in athe database accessible by the device; and

executing the function by the writer module, thereby storing the EPG data in the database.

- 2. (Currently Amended) A method as in claim 1, wherein the function adds a new audio subchannel format to the stored EPG data comprises Audio SubChannel having parameters comprising language Codo, is Main Audio Service, is Dolby Encoded, and program Typo.
- 3. (Currently Amended) A method as in claim 1, wherein the function comprises AudioSubChannelForScheduloEntry having parameters comprising scheduloDataID and andioDataIDadds a new audio subchannel to a schedule entry in the stored EPG data.

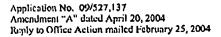
- 4. (Currently Amended) A method as in claim 1, wherein the function comprises Categorization Systems having parameters comprising categorization System Name and system Data 1D creates a new categorization system for storing the EPG data.
- 5. (Currently Amended) A method as in claim 1, wherein the function comprises GategoryPair having parameters comprising systemDataID, categoryName, subCategoryName, and categorypairDataIDadds at least one of a new category and subcategory pair to the database.
- 6. (Currently Amended) A method as in claim 45, wherein the function comprises CategoryForProgram having parameters—comprising programDataID—and categoryPairDataIDmaps a category pair to a specific program.
- 7. (Currently Amended) A method as in claim 1, wherein the function comprises Channel having parameters comprising serviceRecordID, channel, network, station, description, channelType, startSeconds, and channelDataIDadds a new EPG channel to the database.
- 8. (Currently Amended) A method as in claim 1, wherein the <u>a</u> function <u>executed by</u> the writer module comprises ClearAllremoves all EPG data from the database.
- 9. (Currently Amended) A method as in claim 1, wherein the <u>a</u> function comprises ClearChannels executed by the writer module removes all channel data from the database.
- 10. (Currently Amended) A method as in claim 1, wherein the a function executed by the writer module removes all program data from the database comprises ClearPrograms.



- 11. (Currently Amended) A method as in claim 1, wherein the a function executed by the writer module removes all schedule data from the database comprises ClearScheduleEntries.
- 12. (Currently Amended) A method as in claim 1, wherein the <u>a</u> function <u>executed by</u>
 the writer module removes a specific audio subchannel from the <u>database</u> comprises

 DeleteAudioSubChannel having parameter audioDataID.
- 13. (Currently Amended) A method as in claim 1, wherein the a function executed by the writer module removes a specific categorization system from the database comprises DeleteCategorizationSystem having parameter systemDatalD.
- 14. (Currently Amended) A method as in claim 1, wherein the <u>a</u> function <u>executed by</u> the writer module removes a specific category pair from the database comprises

 DeleteCategoryPair—having parameters comprising systemData1D, categoryName, and subCategoryName.
- 15. (Currently Amended) A method as in claim 1, wherein the a function executed by the writer module removes a specific program from the database comprises Delete Channel having parameters comprising channel Object and property Name.
- 16. (Currently Amended) A method as in claim 1, wherein the a function executed by the writer module removes a property from a program object in the database comprises Delete PropertyForProgram having parameters comprising program Object and propertyName.



- 17. (Currently Amended) A method as in claim 1, wherein the a function executed by the writer module removes a property from a schedule entry in the database comprises DeletePropertyForScheduleEntry having parameters comprising scheduleEntryObject and propertyName.
- 18. (Currently Amended) A method as in claim 1, wherein the a function executed by the writer module removes a property from a weblink object in the database comprises DeletePropertyForWeblink having parameters comprising weblinkObject and propertyName.
- 19. (Currently Amended) A method as in claim 1, wherein the <u>a</u> function <u>executed by</u>
 the writer module removes a specific schedule entry from the database comprises
 DeleteScheduleEntry having parameter scheduleEntryObject.
- 20. (Currently Amended) A method as in claim 1, wherein the <u>a</u> function <u>executed by</u> the writer module removes a specific sharing day from the database comprises Delete Sharing Day having parameter sharing Day DataID.

21-22. (Cancelled)

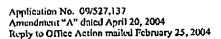
- 23. (Currently Amended) A method as in claim 1, wherein the function-comprises

 EnableDuplicateChecking having parameter preventDuplicates. sets a preferred result for a condition.
- 24. (Currently Amended) A method as in claim 1, wherein the function-comprises Program having parameters comprising programTitle, programDescription, yearMade, seconds, and programDataID. adds a new program to the database.



- 25. (Currently Amended) A method as in claim 1, wherein the function comprises PropertyForChannel having parameters comprising channelDataID, name, and value—adds an extensible name-value property to a specific channel.
- 26. (Currently Amended) A method as in claim 1, wherein the function comprises

 PropertyForProgram-having parameters comprising programDataID, name, and value. adds an extensible name-value property to a specific program.
- 27. (Currently Amended) A method as in claim 1, wherein the function <u>adds an</u> <u>extensible name-value property to a specific schedule entry-emprises PropertyForScheduleEntry having parameters comprising scheduleEntryDataID, name, and value.</u>
- 28. (Currently Amended) A method as in claim 1, wherein the function adds an extensible name-value property to a specific Weblinkeomprises PropertyForWeblink having parameters comprising weblinkDataID, name, and value.
- 29. (Currently Amended) A method as in claim 1, wherein the function adds a new purchase string to a specific schedule entrycomprises PurchaseStringForScheduleEntry having parameters comprising scheduleEntryDataID and purchaseString.
- 30. (Currently Amended) A method as in claim 1, wherein the function <u>maps a rating</u> <u>authority and rating to a specific program-comprises—RatingForProgram-having parameters</u> emprising programDataID and ratingCode.



- 31. (Currently Amended) A method as in claim 1, wherein the a function comprises

 RemoveOldScheduleEntriesAndPrograms having parameter beforeThisTimeexecuted by the

 writer module removes schedule entries and associated program, rating, category, property and

 Weblink data from the database prior to a specific time.
- 32. (Currently Amended) A method as in claim 1, wherein the function adds a new schedule entry to the database comprises ScheduleEntry having parameters comprising eventlD, channelDataID, startTime, endTime, ee, rorun, videoDataID, audioDataID, and scheduleEntryDataID.
- 33. (Currently Amended) A method as in claim 1, wherein the function adds a unique sharing day to the database comprises Sharing Day having parameters comprising startDay, startTime, endDay, endTime, and pSharingDataID.
- 34. (Currently Amended) A method as in claim 1, wherein the function links a unique sharing day to a particular channel comprises SharingDayForChannel having parameters comprising channelDataID, and sharingDataID.
- 35. (Currently Amended) A method as in claim 1, wherein the function indicates a current set of updates to the database is completecomprises UpdateComplete.
- 36. (Currently Amended) A method as in claim 1, wherein the function indicates the current set of updates to the EPG services storage or database is complete comprises VideoSubChannel having parameters comprising language, aspectRation, videoSourcelleight, videoSourceWidth, squarePixel, componentType, streamed, and videoDataID.

- 37. (Currently Amended) A method as in claim 1, wherein the function <u>creates a</u> relationship between a schedule entry and a video subchanneleomprises VideoSubChannelForScheduleEntry having parameters comprising scheduleEntryDataID, and videoDataID.
- 38. (Currently Amended) A method as in claim 1, wherein the function adds a Weblink to the database comprises Weblink having parameters comprising url, description, startTime, endTime, and pweblinkDataID.
- 39. (Currently Amended) A method as in claim 1, wherein the function maps a Weblink to a specific channel comprises WeblinkForChannel having parameters comprising channelDataID, and weblinkDataID.
- 40. (Currently Amended) A method as in claim 1, wherein the function <u>maps a</u> Weblink to a specific <u>programeomprises WeblinkForProgram having parameters comprising programDataID</u>, and weblinkDataID.
- 41. (Currently Amended) A method as in claim 1, wherein the function <u>maps a</u> Weblink to a specific schedule entry comprises WeblinkForScheduleEntry having parameters comprising scheduleEntryDataID; and weblinkDataID.
- 42. (Currently Amended) A computer-readable medium having computer-executable instructions for performing the stepsimplementing the method recited in claim 1.



43. (Currently Amended) In a device-having electronic program guide (EPG) data from one or more EPG data sources stored in a database associated with the device, a method for interfacing the EPG data stored in the database with one or more applications operating at the device, the method comprising the steps of A method as recited in claim 1, further comprising:

calling a function of a control module operating at the device that accesses the database to retrieve the EPG data and transmits the EPG data to the one or more applications; and executing the function by the control module.



- 44. (Currently Amended) A method as in claim 43, wherein the function <u>retrieves a</u> collection of names of known schemes for organizing programs by typecomprises CategorizationSystems having parameter psystems.
- 45. (Currently Amended) A method as in claim 43, wherein the function returns a time in the future at which available data endscomprises DataEndTime having parameter endTime.
- 46. (Currently Amended) A method as in claim 43, wherein the function <u>returns a furthest time in the future when a program starts</u>comprises HighestDataStartTime having parameter startTime.
- 47. (Currently Amended) A method as in claim 43, wherein the function returns information to confirm if valid channel and cuide listings exist in the databasecomprises IsAnyDataAvailable having parameter dataAvailable.
- 48. (Currently Amended) A method as in claim 43, wherein the function <u>returns</u> <u>information to indicate if channel data exists in the database comprises IsChannelDataAvailable</u> <u>having parameter channelDataAvailable</u>.

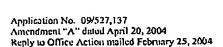


- 49. (Currently Amended) A method as in claim 43, wherein the function <u>retrieves a</u> collection of strings for names of known schemes for organizing content ratings comprises Rating Systems having parameter systems.
- 50. (Currently Amended) A method as in claim 43, wherein the function <u>retrieves a</u> channels collection objects omprises Available Channels having parameter channels.
- 51. (Currently Amended) A method as in claim 43, wherein the function comprises

 CancelCategoryEventRequestdisables signaling of update events.

52-53. (Cancelled)

- 54. (Currently Amended) A method as in claim 43, wherein the function <u>retrieves a collection of names of main categories within a categorization system for a given categorization system name comprises-Categories having parameters comprising categorizationSystemName and categories.</u>
- 55. (Currently Amended) A method as in claim 43, wherein the function <u>returns</u> channels <u>matching</u> a <u>scarch value</u> comprises <u>ChannelsForProviderNetworkName having</u> parameters comprising searchString, substringMatch and channels.
- 56. (Currently Amended) A method as in claim 4350, wherein the function retrieves the Channels collection object for valid device channels with a particular channel number-comprises ChannelsForNumber having parameters comprising serviceSpace, channel, time-and-channels.



57. (Cancelled)

- 58. (Currently Amended) A method as in claim 43, wherein the function returns information indicating whether EPG data is found for a range-comprises IsScheduleDataAvailable having parameters comprising startTime, endTime and scheduleDataAvailable.
- 59. (Currently Amended) A method as in claim 43, wherein the function retrieves a program object representing a program shown on a specified channel at a specified timecomprises Program having parameters comprising service Space, channel, time and program.
- 60. (Currently Amended) A method as in claim 43, wherein the function <u>retrieves an</u>

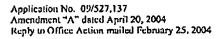
 end time for a program comprises—ProgramEndTime having parameters comprising

 serviceSpace, channel, time, and endTime.
- 61. (Currently Amended) A method as in claim 43, wherein the function retrieves a length of a program showneemprises ProgramLength having parameters comprising serviceSpace, channel, time, and seconds.
- 62. (Currently Amended) A method as in claim 43, wherein the function eomprises ProgramRating having parameters comprising serviceSpace, channel, time, ratingSystem, and ratingretrieves a rating object for a particular program.
- 63. (Currently Amended) A method as in claim 43, wherein the function <u>retrieves the</u>
 <u>start time for a particular programeomprises-ProgramStartTime having parameters comprising</u>
 <u>serviceSpace, channel, time, and startTime</u>.

KIN

- 64. (Currently Amended) A method as in claim 43, wherein the function <u>retrieves a name of a programeomprises ProgramTitle having parameters comprising serviceSpace, channel, time, and title.</u>
- 65. (Currently Amended) A method as in claim 43, wherein the function <u>indicates</u> that an event should be fired when any aspect of a known categorization system of the database changeseemprises RequestCategoryUpdateEvent.
- 66. (Currently Amended) A method as in claim 4365, wherein the function indicates that the event should be fired when a new channel has been added to the database comprises Request Channel Update Event.
- 67. (Currently Amended) A method as in claim 43, wherein the function <u>returns</u> <u>updates occurring within a particular time range-comprises RoquestRangeUpdateEvent having parameters comprising startTime, and endTime</u>.
- 68. (Currently Amended) A method as in claim 43, wherein the function <u>returns all</u> schedule time slots matching query valueseemprises ScheduleEntries having parameters comprising serviceSpace, channel, startTime, endTime, and scheduleEntries.
- 69. (Currently Amended) A method as in claim 43, wherein the function <u>returns</u> <u>programs that match query values</u> <u>comprises-SchoduleEntriesForCatogories-having-parameters</u> <u>comprising categorizationSystem, categories, startTime, endTime, maxHits, and scheduleEntries.</u>

70-71. (Cancelled)



72. (Currently Amended) A method as in claim 43, wherein the function <u>retrieves a collection object representing all time periods for programs whose title or description includes a particular case-insensitive string-comprises ScheduleEntriesForStrings having parameters comprising searchStrings, substringMatch, findTitle, findDescription, startTime, ondTime, maxHits, and scheduleEntries.</u>

73. (Cancelled)

- 74. (Currently Amended) A method as in claim 43, wherein the function <u>retrieves a collection of subcategory names for a given category namecomprises SubCategories having parameters comprising categorizationSystemName, categoryIndox, and subCategories.</u>
- 75. (Currently Amended) A method as in claim 43, wherein the function <u>indicates</u> that a new category has been added to the EPG datacomprises OnCategoryUpdate.
- 76. (Currently Amended) A method as in claim 43, wherein the function <u>indicates</u> that a new channel has been added to the EPG data comprises OnGhannelUpdate.
- 77. (Currently Amended) A method as in claim 43, wherein the function <u>indicates</u> that the EPG data within a particular time range has changedcomprises OnRangeUpdate.
- 78. (Currently Amended) A computer readable medium having computer executable instructions for performing implementing the methodthe steps recited in claim 43.
- 79. (New) A method as recited in claim 1, wherein the conflict resolution criteria includes prioritizing each EPG loader with a different priority, and wherein resolving the conflict includes giving precedence to EPG data received from EPG loaders having higher priority.



- 80. (New) A method as recited in claim 1, wherein the conflict resolution criteria includes giving each EPG loader equal priorities, and wherein resolving the conflict includes giving precedence to EPG data that is received most recently.
- 81. (New) A method as recited in claim 1, wherein resolving the conflict includes allowing a user to select a conflict resolution scheme.
- 82. (New) A method as recited in claim 81, wherein allowing the user to select a conflict resolution scheme includes allowing a user to assign a priority to the EPG loaders.
- 83. (New) A method as recited in claim 1, wherein resolving the conflict includes allowing an application to select a conflict resolution scheme.